Testimony before the U.S.-China Economic and Security Review Commission

The Challenge of China's Green Technology Policy and Ohio's Response

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My name is Ross Bushman and I am President and owner of Cast-Fab Technologies located in Cincinnati, Ohio. Cast-Fab is one of the largest foundries and fabrication shops in the United States. Cincinnati Milacron was the original owner of the Cast-Fab facility, which was built in 1940 and was later purchased by the Bushman family in 1988. Cast-Fab is a Gray and Ductile Iron Foundry as well as a Sheet Metal and Structural Fabrication shop. The facility has over 500,000 square feet and during its peek the Milacron complex was the world's largest producer of machine tools.

Cast-Fab has grown from almost an exclusive producer of machine tool components to producing fabrication and casting to a multitude of industries including: Mining and Construction, Machine Tools, Plastic Injection Molding, Pumps and Valves, Electrical Components, HVAC and of course the Wind Energy Industry. Cast-Fab is the parent company of Security Systems Equipment (SSE) that provides products to the Banking Industry and Coldwell-Wilcox that is a provider to the Water and Waste Water Flow Control Industry.

Cast-Fab's Foundry Operation is capable of pouring Gray, Ductile and High Impact Iron ranging from 10 pounds to over 80,000 pounds. Cast-Fab is capable of making its own patterns from a wide range of materials as well as machining and painting the finished castings. These castings are shipped all over the U.S. as well as the world.

The Fabrication Operation is divided up into two divisions; light gauge sheet metal and heavy plate fabrication. We can produce anything from a small cabinet of light gauge sheet metal to an 80,000 pound welded component made from 2 inch steel plates. We have certified welders along with a quality control department. The entire facility is ISO 9001-2008 Certified and we have been ISO certified since 1993

Wind Energy has been a tremendous growth industry for Cast-Fab over the past several years. Our success is due to our unique ability to produce high quality Ductile Iron Castings that meet the stringent European Impact Grade Requirement that accompanies Wind Turbine works. Our qualified work force, rigid quality controls

and ability to meet the growing needs in the Wind Energy Industry made Cast-Fab one of the leading suppliers in the U.S. This continued until November 2008.

Starting at the end of 2008 and continuing through most of 2009, the market for fabricated and cast components dropped to virtually nothing. The Wind Energy Industry was hit particularly hard. By far, the three (3) biggest financiers of Wind Projects were household names -- AIG, Lehman Brothers and Wachovia. The well-documented decline of these institutions meant projects in the U.S. could not be financed. Almost every project in the U.S. was either put on hold or discontinued. Even the well-publicized plan by T. Boone Pickens was shelved after taking delivery of just a few of the turbines he had on order.

As a result of the capital goods and the Wind Industry coming to a stand still, we had to make some very difficult decision at our facility. In order to remain a viable entity we had to cut a sizeable percentage of our work force. These were very difficult times for our facility as well as the majority of the foundries around the U.S.

When the Economic Stimulus Bill was passed we were hopeful that the Renewable Energy Incentives in the Bill would spur the investment in Wind Energy and help energize the Foundry business. Unfortunately, projects that were in the development pipeline at the time the Bill was enacted were exempt from the Stimulus Funds. All of the Wind Energy Projects had to go back to the development stage and start over. This delayed any funds being injected into manufacturing, as everyone had to wait for these projects to be developed and engineered.

While we wait for the impact of the Economic Stimulus Bill, we continue to see the evidence of foreign castings coming into the U.S. Many of the machine shops and OEM's I visit in the US are full of castings from China. These castings from China are sold to our customers below our costs to produce them by a significant margin. In these tough economic times as we struggle to protect Ohio jobs, while these cheap foreign castings continue to pour into our customers.

I believe that the "Buy American" provision of the Stimulus Bill is weak at best. If we are to have a clause concerning Buying American, it needs to be strengthened and rigorously enforced. If we are going to "spend" taxpayer's money to stimulate the economy, this money should not end up in foreign manufacturing plant or foreign component supplier. Instead this money should find it's way into American Corporations saving American Jobs.

I would encourage Committee Members to read the report written by the Investigative Reporting Workshop at the American University's School of

Communication in Washington D.C. This report documents that over 2 Billion Dollars from the American Recovery and Investment Act was spend on the development of Wind Power. This funding created enough Wind Energy to power 2.4 million homes over a 12-month period. Unfortunately over 80% of the funding ended up in the hands of foreign manufacturing corporations. Russ Choma, who works for the Investigative Reporting Workshop was quoted as saying "most of the jobs that were created (by the Stimulus Money) were overseas.....According to our estimates, about 6,000 jobs have been created overseas, and maybe a couple of hundred have been created in the U.S."

When comparing the Industrial Policies of China with those of the United States you see some striking differences.

Subsidized investments and electric rates, along with the manipulation of the Value Added Tax (VAT) for certain industries play a large part in China's competitiveness. The hourly pay rate and benefits for workers between the two countries are well documented and are a tremendous disadvantage to U.S. manufactures trying to compete. In addition the large and burdensome layers of governmental regulations that U.S. manufactures are forced to adhere to may be the largest deterrent to becoming more competitive.

During 2008 and 2009 we made some very painful and significant cuts in our workforce. Noted author, Marcus Buckingham writes that the "#1 job of a leader is to rally their people to a better future" But it is very difficult to rally and motivate any workforce when they continually hear negative news about their industry. The media vilifies industry and business as one that willingly harms its workforce and skirts governmental regulations. The rhetoric from the EPA and OSHA continues to grow more negative towards building a partnership with manufacturers. We continue to burden our industry with over regulation that costs us tens of thousands of dollars and makes it hard to be competitive. These regulatory burdens do not exist in China. As U.S. Foundries spend valuable resources to adhere to these regulations, our foreign competition uses their resources to grow and plan for the future.

To help stimulate our industry and promote some long-term growth, it is imperative that the incentives put in place by the Stimulus Bill are extended past the current three-year time frame. Extending the time frame for incentives will encourage manufacturing to invest in the future and put money into building projects and infrastructure. We need long-term incentives that produce long-term financial commitments. Prior to the stimulus bill, we had renewable one-year incentive plans for wind, sometimes passed retroactively. These starts and stops wreak havoc on our customer's orders and our production hours.

I would also like to see the Federal Government adopt the Roadmap proposed by the Department of Energy that paves the way for the US to generate 20% of its electric needs by the year 2030. People from throughout the Wind Energy supply chain were part of the development process of the Roadmap.

In addition, if Stimulus money continues to be funneled into the Wind Industry for new projects, these projects must have a requirement to "Buy American". Stop providing money to manufactures that take profits and jobs overseas.

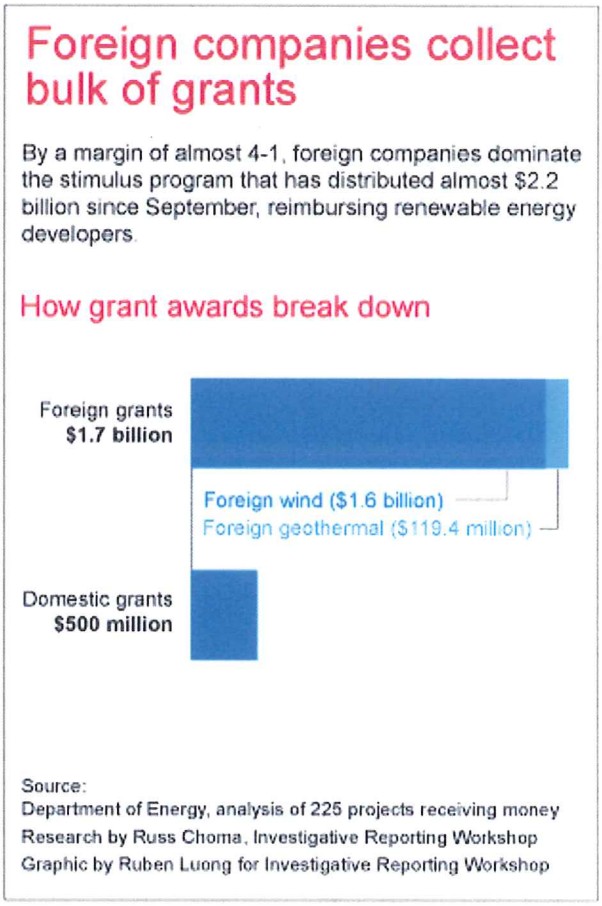
In order to compete against China in Green Technology and other manufacturing sectors, foundries from around the U.S. need the help of the Government. You have the power and the duty to help us be more competitive by offering larger incentives; extending stimulus programs and helping us reduce regulations that burden our industry. Keeping money and jobs within our borders will help us compete and once again be a world power.

Renewable energy money still going abroad, despite criticism from Congress

http://investigativereportingworkshop.org/investigations/wind-energy-funds-going-overseas/

By Russ Choma Monday, February 8th, 2010

The Investigative Reporting Workshop reported this story in coordination with ABC's World News Tonight with Diane Sawyer and the Watchdog Institute, a non-profit investigative journalism group based at San Diego State University.



Money from the 2009 stimulus bill to help support the renewable energy industry continues to flow overseas, despite Congressional criticism and calls for change, according to a new analysis of the program by the Investigative Reporting Workshop.

The Workshop was the first to report last October that more than 80 percent of the first $1 billion in grants to wind energy companies went to foreign firms. Since then, the administration has stopped making announcements of new grants to wind, solar and geothermal companies, but has handed out another $1 billion, bringing the total given out to $2.1 billion and the total that went to companies based overseas to more than 79 percent.

In fact, the largest grant made under the program so far, a $178 million payment on Dec. 29, went to Babcock & Brown, a bankrupt Australian company that built a Texas wind farm using turbines made by a Japanese company.

The same day the Workshop's first reported on this story a consortium of American and Chinese companies announced a deal to build a $1.5 billion wind farm in Texas, using imported Chinese turbines. Company officials said they planned to collect $450 million in stimulus grants for the project. The deal would create dozens of jobs in the U.S. and thousands in China. The news provoked outrage among lawmakers, particularly after the Energy Department seemed to take a neutral stance, declining to say whether it would reject such an application.

The key word is 'jobs'

"In all due respect I remind the secretary (of Energy) there is a four-letter word associated with the stimulus -- J-O-B-S," Sen. Charles Schumer, D-N.Y., told ABC News who interviewed him for a report done in coordination with the Workshop's ongoing investigation. "Very few jobs here, lots of jobs in China. That is not what I intended or any other legislator who voted for the stimulus intended."

If companies want to buy Chinese turbines, they can, Schumer said, but they shouldn't do it with tax dollars that were earmarked for jumpstarting an American industry.

"It is fine that the Chinese make them. But why don't we use the stimulus money to start building up an industry to build them here, that was the very point of the stimulus," Schumer told ABC. "No one even imagined, given how strongly the stimulus advertised jobs in America, that this would happen. I am befuddled that it happened and even more befuddled that the Energy Department is not backing off."

The administration and the wind energy lobby now say that the aim of the program was not to create jobs immediately, despite its being included in the stimulus package, but rather to help support long-term investments in renewable manufacturing in the United States. The program, which cost $1.05 billion in the year ended last Sept. 30, would get another $3.08 billion this fiscal year, and will peak in 2011 with an outlay of $4.46 billion, according to the president's proposed budget released in early February.

Rob Gramlich, vice-president for public policy at the American Wind Energy Association , the industry's main lobbying and advocacy group which counts all of the foreign companies that have received funding thus far as members, told the Workshop the grants were only intended as a lifeline to keep the industry afloat during tough times.

"We strongly support the policy and are giving the adminstration and Congress a lot of credit for putting it in place and redesigning how it worked … but it wasn't a long-term jobs policy and it wasn't really intended to be a long-term jobs policy," he said.

In fact, in recent months, both U.S. and foreign renewable energy manufacturing companies with production in the United States have either closed or slowed down production.

The Danish company, Vestas, said it was halting production at a wind turbine blade plant in Windsor, Colo. The company said it would probably have to slow development of two other facilities planned for the same area. Gamesa, a Spanish wind turbine company, said it was laying off about half of the remaining workers at a Pennsylvania production facility. Two major solar production efforts in the U.S. shuttered – GE Solar in Newark, Del., and Evergreen Solar in Marlborough, Mass. Evergreen , the recipient of state and federal incentives, announced it would restart production in China.

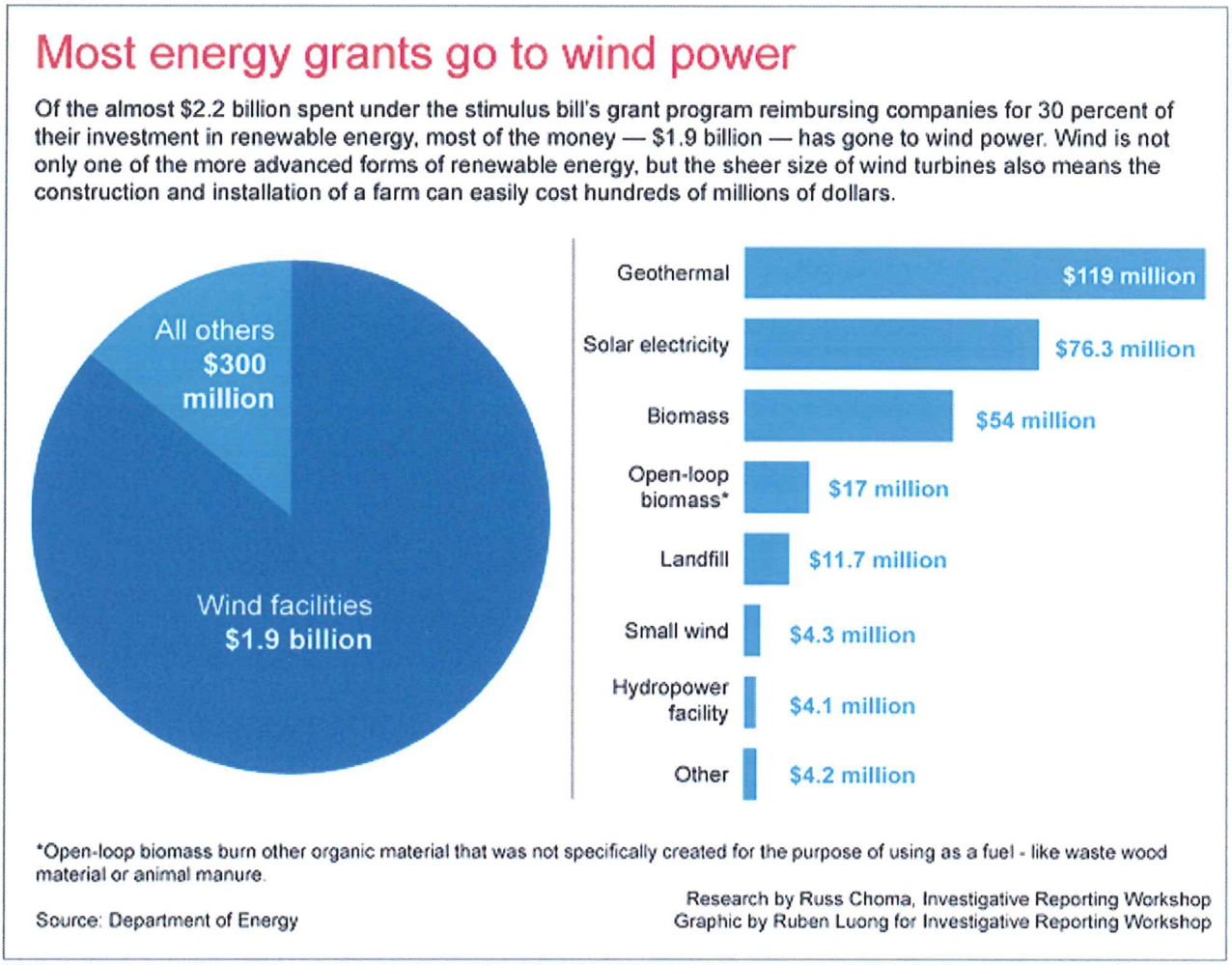
Joan Fitzgerald, director of the law, policy and society program at Northeastern University and author of several books on green economic opportunity, said the recent trends in the industry are depressing and attempting to stimulate the field with a grant program that sends so much money to foreign-owned companies doesn't help.

"I still feel that with wind there's some potential but I don't know how to get solar production in this country. I think we've lost it," she told the Workshop.

How the grant program works

The grant money is distributed under a program administered by the Energy Department and Treasury, and is supposed to reward companies for investing in renewable energy facilities to encourage them to reinvest in America. But there are few American companies to take advantage of the program and with no restrictions on how or where the money can be spent – and no discretion in who it can be given to – the helping hand from taxpayers seems to be largely bypassing American workers.

A previous report by the Investigative Reporting Workshop published in October found that about $860 million in stimulus money had gone to foreign wind companies alone. That pattern has continued, with now just under $1.6 billion – or 73 percent – awarded to foreign-owned wind companies. The majority of turbines purchased with the money have been built by foreign manufacturers. Including other forms of energy, like solar and geothermal, 79 percent ($1.71 billion) has gone to foreign companies.



The law authorizing the grants is broad and requires only that companies bring a power plant that qualifies as renewable energy online after Jan. 1, 2009 or starts construction before Dec. 31. There is nothing in the law requiring that the money be spent in the United States. (See the text of the stimulus section .)

Not a jobs program, a lifeline

The stimulus package, as a whole and specifically this program, has been hailed by advocates and administration officials as a job creator, but following the Workshop's report and letters from Schumer and Sen. Kit Bond (R-Mo.), the message was refined to focus on long-term benefits.

In a message posted on his Facebook page Energy Secretary Steven Chu wrote that the point of the grant program was, "ensuring America leads the world in creating jobs in manufacturing the parts that go into wind farms" and, eventually, even export components to foreign wind farms.

But before manufacturing – and the jobs that come with it – can be established, demand for the product needs to be established, Chu wrote. The grants "provide the precondition to jump start the manufacturing," he explained.

In an interview with ABC News, Matt Rogers, Chu's senior advisor on stimulus, disputed the Investigative Reporting Workshop's finding that as much as 80 percent of the program's grant money is going to foreign firms.

"I think the first observation is I don't think the data in that specific case is correct. If you take a look at where the jobs are - the jobs are in the United States," Rogers said. "Every dollar from the Recovery Act is going to create jobs for American workers here in the United States."

While some construction jobs are created when a wind farm is built, they last, on average, nine months. Additionally, many of the wind farms that received money were online or close to completion by the time the stimulus bill was passed.As the outcry over the Chinese proposal indicates, more significant than the

wind farm owners that have collected the money is where they spent it– the origin of the turbines they install. Most of the economic activity created by investing in wind energy comes from the turbine manufacturing; of the 1,807 turbines erected on 28 wind farms receiving grants, foreign-owned manufacturers built 1,219.

The turbines are composed of three major parts –steel towers, fiber-composite blades and nacelles, which house the most sophisticated components, including the generation, transmission and braking systems. A study by the Renewable Energy Policy Project , a think-tank that advocates renewable energy technology research, estimates that for every 1 megawatt of wind energy that is developed, 4.3 jobs are created: 0.6 in operation and maintenance of the wind farms; .7 for the installation of new turbines; and 3 in manufacturing.

The 1,219 turbines built by foreign-owned manufacturers have a potential capacity of 2,279.5 megawatts. Using the REPP estimate, the installation of these turbines may have created as many as 6,838 manufacturing jobs overseas.

When the wind energy association released its 2009 year-end report on Jan. 26, association president Denise Bode heralded the installation of 10 gigawatts of new wind capacity,but acknowledged there had actually been a net loss in manufacturing jobs. Bode told USA Today she estimates the manufacturing job loss at 1,500 jobs. About as many jobs in construction and operation were created, but construction on all projects that have received money ended long before the grants were made. For some of the projects, construction was complete even before the stimulus bill was passed in February.

On the White House's stimulus blog, an administration official hailed the wind energy association's report as a sign the, "recovery winds are blowing" but made no mention of the job losses.

Who got what?

Any type of renewable energy facility put into service after Jan. 1, 2009 is eligible for the grant program – outlined under Section 1603 of the American Recovery and Reinvestment Act of 2009 – but since the first payments were made on Sept. 1, $1.88 billion has gone to wind companies.

The single largest grant under the program, reported by the Energy Department on Dec. 29, was $178 million for the Texas Gulf Wind farm in Sarita, Texas. The farm is owned by a bankrupt Australian infrastructure and energy investment firm Babcock & Brown . All 118 turbines erected on the farm were built by Mitsubishi – a Japanese firm that does not build wind components in the United States.

Iberdrola Renewables, the American subsidiary of Spanish utility Iberdrola S.A., has collected more money than any other company – $577 million. The company announced it expects to collect another $430 million in 2010. In total, Spanish companies have collected $708.3 million. Utilities owned by Portuguese, German and British companies also have collected funding.

Horizon-EDPR, the American-subsidiary Portuguese utility Energias de Portugal's renewable division, has received $277.5 million.

Eurus Energy America, the U.S. subsidiary of a Japanese firm, received $91 million in stimulus money for its Bull Creek wind farm in Texas. The farm consists of 180 Mitsubishi turbines. Illustrating the often international nature of deals in the U.S. wind industry, a company executive told the Watchdog Institute that his company used RES Americas, a British firm, as the general contractor to build its facility. Eurus is now employing EnXco, a subsidiary of French renewable energy firm EDF Energies Nouvelles, to operate the farm.

Five U.S. companies have received a combined $290.7 million, with First Wind and NextEra (a subsidiary of Florida Power & Light) receiving the largest shares, $115 million and $99.9 million, respectively. (Details on wind projects and all renewable projects .)

Manufacturing is a complicated issue

Trying to divine whose pocket the stimulus money eventually ends up in is difficult because of the complex nature of wind turbines. Even the companies that have significant turbine production facilities in the United States rely on foreign sources for many of the 8,000 components.

So, where did the parts used in these turbines come from?

In a Facebook posting, Energy Secretary Chu wrote that possibly as much as 53 percent of components used in turbines under the grant program were manufactured in the United States. That estimate was developed by the wind energy association based on the first 11 projects that received funding and were cited in the Workshop's first story. That figure does not include any of the 18 projects that received funding after the Workshop's original report was published.

According to Elizabeth Salerno, the association's director of industry data and analysis, the association surveyed the member companies involved with the projects and then created a formula to arrive at that calculation. Salerno declined to provide that information to the Workshop because the information was provided by members confidentially.

According to Salerno and Gramlich the formula that was used weighted components by their dollar value. The association declined to provide any of the calculations or a sample of their calculations, but did provide a sample document showing how the dollar value of a turbine's components might be determined. Gramlich said the average turbine has an overall domestic content "close to the level of Chrysler cars." In 2008, AWEA analysts estimate that almost 50 percent of components were domestically sourced, up dramatically from only a few years earlier.

Too big to build elsewhere

Besides the complexity of each turbine, the enormous size of many parts has long been cited as a reason why manufacturing will eventually come to the U.S. A turbine's blades, for example, can reach 200 feet long and must be fabricated and transported in one piece. Likewise, the steel towers can weigh hundreds of tons. Moving both components even short distances can be cumbersome and require closure of roads and specially equipped vehicles or multiple trucks operating in tandem. But, for the same reason, it may be easier or cheaper to ship blades or tower segments thousands of miles by water than it is to transport them several hundred miles by road or rail.

"Everyone thought in the beginning, 'Oh, turbines are too big to not build here,'" said Joan Fitzgerald, a professor at Northeastern University who specializes in green economy development and has written several books on the subject. "There are cities up and down the west coast and in Texas that have just totally redone their ports for importing wind turbines. This idea that we can't import them because they're too big is not the case."

By examining U.S.Customs and Border Protection records the Workshop discovered turbine components are being imported from China, Germany, Spain and Brazil, including even the biggest and heaviest parts like blades and steel towers.

Although not a comprehensive review of all imports, the Workshop investigation found numerous instances large foreign-made components being used in the wind farms awarded grants.

For example, on June 1, 2009, Vestas Americas, a subsidiary of the Danish turbine giant, unloaded 30 generators and hubs at the port of Portage, Ind. The pieces were destined for Meadow Lake Wind Farm, an Indiana facility built by Portuguese-owned Horizon-EDPR. On June 19, Vestas received shipment of 94 blades at the same port, to be sent to the same wind farm. A few months earlier, on March 11, Vestas unloaded 72 sections of steel towers – some weighing in excess of 55 tons – from the container ship Marinus Green, at the port of Vancouver, Wash. The towers arrived in Washington state after travelling 7,400 miles from Baria Vungtau Province, Vietnam, where they were constructed by CS Wind – Vietnam's leading steel tower manufacturer. According to the bill of lading, the tower segments were sent to Meadow Lake.

Meadow Lake was awarded $113 million in stimulus money.

According to the Customs data, Vestas has accepted at least 20 other shipments from CS Wind in the last two years, some larger than Meadow Lake towers.

In an interview with the Watchdog Institute, Gary Hardke, president of Cannon Power Group, a San Diego-based wind farm developer said his company spent more than half the $19.4 million they received in federal grant money overseas.

Cannon partnered with German industrial giant, Siemens, to install 114 turbines at the company's Windy Flats wind farm in Klickitat, Wash. Cannon has announced they expect to receive more than $170 million as other phases of the wind farm are completed.

Hardke said he couldn't say positively where all of the components were sourced from – some of the steel towers were domestically made and some were from China and Siemens told Cannon the blades were likely made in the U.S., "but we're not positive." The nacelles were imported from Denmark.

Hardke told the Watchdog Institute that the cost of transporting the turbines can top $300,000 so domestic manufacturing would be preferable, but to purchase just a nacelle that is entirely sourced domestically would require reconfiguring the supply chain for some 3,000 components.

Struggling to keep up in the race

President Barack Obama has talked of a worldwide foot race to be the clean energy leader. As recently as Jan. 8, he noted the United States is struggling to keep up.

"Harnessing new forms of energy will be one of the defining challenges of the 21st century. And unfortunately, right now, the United States, the nation that pioneered the use of clean energy, is being outpaced by nations around the world," Obama said in a speech. "I don't want the industries that yield the jobs of tomorrow to be built overseas."

Obama was announcing $2.3 billion in tax credits for manufacturers, including foreign companies that are hoping to set up manufacturing in the United States. Unlike the grant program investigated by the Workshop, the administration gave out the tax credits based on how many domestic jobs would be created.

But that program, which Obama said would create about 17,000 jobs, is short on cash, even as the administration continues to freely hand out cash grants to foreign wind developers, with no obligation to reinvest the money or purchase U.S.-made turbines. The administration received over $7 billion in requests for tax credits from manufacturers and Obama has asked Congress to provide another $5 billion to meet that.

According to Fitzgerald and several other industry observers contacted by the Workshop, without more innovation by U.S. companies, the manufacturing jobs will only be as good as the foreign company that sets them up. A recent report by the Breakthrough Institute found the U.S. will be outspent over the next five years on green tech research and development by its Asian competitors by a factor of four-to-one (including R&D funds included in the cap-and-trade bill still lingering in the Senate.)

"I'd like to be positive but that's a lot," Joan Fitzgerald said. "Look at the difficulty Obama is having getting some things through, even with a majority. And now you've got people clamoring about deficit and deficit reduction. I don't know how much we'll really be able to add."

The administration's focus should be on the manufacturing – and making sure it stays here – said United Steelworker's president Leo W. Gerard. The trend – in green energy as it is in all manufacturing – is towards sending manufacturing overseas, he said.

"If we keep following the trend lines of what's existing, we're going to end up with an inability to generate real wealth," Gerard told the Workshop. "My concern is that it's more than wind turbines, and my concern is how we stake out our ground and have a manufacturing strategy for the country that will lead us back to the ability to create real wealth."